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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,309	02/28/2002	Jean-Francois Kummel	145.002	7609

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EXAMINER

TUGBANG, ANTHONY D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,309

Applicant(s)

KUMMEL, JEAN-FRANCOIS

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 2,5,6 and 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the invention of Group I, Species B in Paper No. 4 is acknowledged. The traversal is on the ground(s) that Claims 2, 5 and 6 corresponding to Species A are inaccurate because Claims 1-5 are generic and Claim 6 only encompasses transfer molding with the remaining limitations being the same as that of Species B. Thus, all of claims 1-10 in Group I should be examined. This is not found persuasive because "transfer molding" is a completely different molding process as compared to "injection molding" and that Claims 2, 5 and 6 each have mutually exclusive characteristics and are patentably distinct to Claims 4 and 7-10. See MPEP § 806.04(f) and 806.04(h). The requirement is still deemed proper and is therefore made FINAL.

2. Claims 2, 5, 6 and 11-17 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 5.

Information Disclosure Statement

3. As part of the original papers filed with the application, a letter from the applicant indicated that an information disclosure statement (IDS) was filed. However, after a thorough review of the entire application by the examiner, no IDS is enclosed. The examiner kindly request that the applicant resubmit the IDS in response to this Office Action so that the examiner can carefully consider the references listed on the IDS.

Priority

4. This application filed under former 37 CFR 1.60 lacks the necessary reference to the prior application. A statement reading "This is a Continuation-in-Part of Application No. 09/509,747, filed on March 30, 2000." should be entered following the title of the invention or as the first sentence of the specification. Also, the current status of all nonprovisional parent applications referenced should be included.

Specification

5. The abstract of the disclosure is objected to because the abstract is not directed to the claimed invention, i.e. method. Correction is required. See MPEP § 608.01(b).

6. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.**

Extensive mechanical and design details of apparatus should not be given.

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Method of Manufacturing an Inductive Component.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Billings et al 4,745,388.

Billings discloses a method of manufacturing an inductive component comprising: winding a wire having ends to form a winding (either one of primary windings 28 or 32) in the form of a flat coil (see col. 1, lines 62-67); connecting the ends of the winding to inner ends of connecting terminals 24; overmolding a body (assembly 14) from a block of insulating material onto the coil and onto inner ends of the connecting terminals so that a lower face of the body is orthogonal to an axis of the coil with the body including a central opening or hole (see Fig. 1); and placing a ferrite core 12 on the body such that the core surrounds the body in a center plane containing the axis of the coil and has a center coil element (cylindrical projection not labeled on core section 12) passing through the central opening of the body. It is noted that Billings does not recite the use of any "former". Thus, the winding step of Billings is considered to be "performed without using a former".

Regarding Claim 3, the claimed "grid" is read as hub 16 and the coil is considered to be bonded, i.e. jointly attached, to the grid through slots 26.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billings et al in view of Yanase et al 4,370,292.

Billings teaches the claimed manufacturing method as previously discussed and further including forming the block of material by overmolding with plastic to mechanically protect the wire leads of the winding (see col. 1, line 62 to col. 2, line 29). Billings does not teach the use of a non-magnetic adhesive or specifically injection molding process using a thermoplastic polymer.

Yanase teaches an overmolding process of injection molding a thermoplastic polymer for several advantages, such as to mechanically protect windings and provide an inductive component with high efficiency and accuracy during operation (see col. 1, lines 13-26).

Regarding Claim 4, Yanase teaches that the thermoplastic polymer acts a non-magnetic adhesive for overmolding material (see col. 3, lines 50-54).

Regarding Claims 8 and 9, Yanase further teaches at least one example of injection molding at 300 °C at pressure ranges between 10-150 kg/cm², which is approximately 10-150 bars (see col. 6, lines 38-48).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the molded body of Billings with the overmolding process of Yanase, to mechanically protect and bond the leads of the windings to the body, as well as positively provide an inductive component with high efficiency and accuracy during operation.

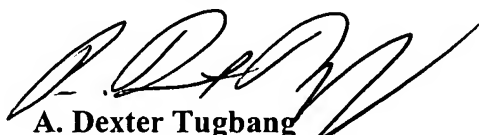
Regarding Claim 10, it would have been an obvious matter of design choice to choose any desired cycle time range of injection molding, since applicant has not disclosed that the claimed time of less than 15 seconds, solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the time cycle taught by Yanase.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


A. Dexter Tugbang
Primary Examiner
Art Unit 3729

September 16, 2003